(No Model.)

W. H. & J. H. FREY.

DEVICE FOR HEATING TIRES.

No. 266,984. Patented Nov. 7, 1882.

Fig. 1.

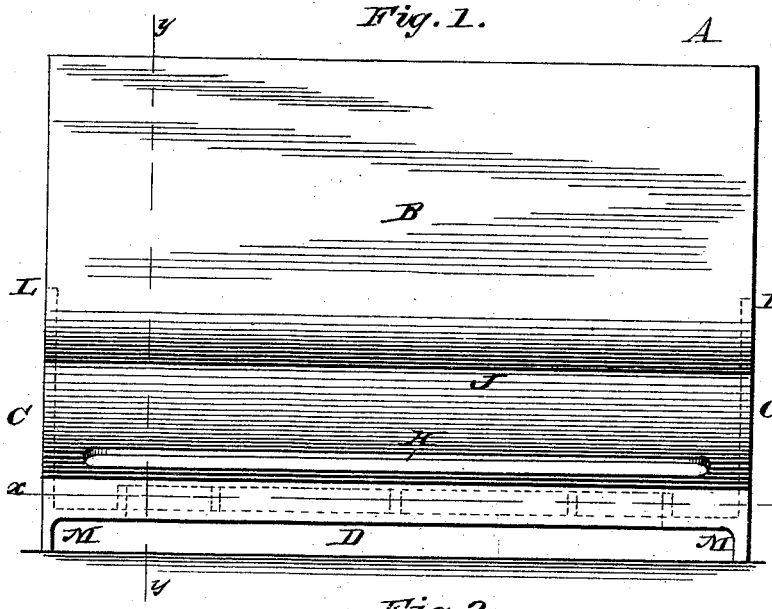


Fig. 3.

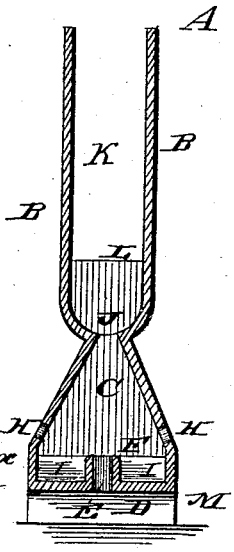


Fig. 2.

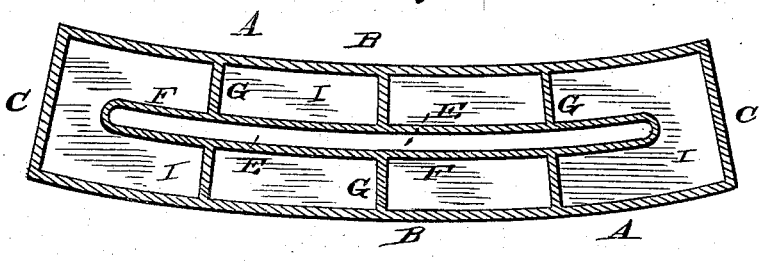


Fig. 4.

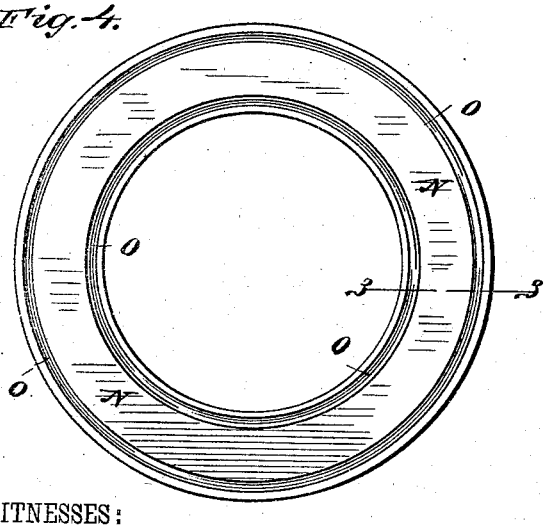
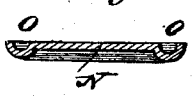


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM H. FREY AND JAMES H. FREY, OF ERIE, PENNSYLVANIA.

DEVICE FOR HEATING TIRES.

SPECIFICATION forming part of Letters Patent No. 266,984, dated November 7, 1882.

Application filed February 24, 1882. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. FREY and JAMES H. FREY, of Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Heating Tires; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to devices for heating tires; and it consists essentially in the construction of a lamp or heater, a number of which may be placed together upon a suitable disk or frame, and form an annular chamber of suitable size, in which the tire may be placed and heated, as will be hereinafter more fully described with reference to the drawings, in which—

Figure 1 is a side view of one of our improved lamps or tire-heaters. Fig. 2 is a horizontal sectional view of the same on the line *x x*. Fig. 3 is a vertical sectional view on the line *y y*. Fig. 4 is a plan view, on a small scale, of a ring or disk to be used in connection with my invention; and Fig. 5 is a sectional view on the line *z z* of the same.

Corresponding parts in the several figures are denoted by like letters of reference.

A represents one of my improved lamps or heaters, which consists of a box or case segmental in shape—that is, with curved concentric side walls, B B, and straight radial end walls, C C. The end walls, C, of the box are vertical, and its bottom D is horizontal. The bottom D has a slot or draft-opening, E, which is surrounded with a flange, F, of suitable height to enable a sufficient quantity of oil to be poured into the box without escaping through the slot E.

The flange F is connected with the side walls by ridges G, which, if the device should be tilted or inclined, will prevent the oil from running down to one end of the box.

Slots or draft-openings H are formed in the sides of the box. Said sides above the oil-receptacle I are made inclined or contracted, so as to form a narrow throat, J, serving to concentrate the flame and heat. Above the throat J the sides again expand and extend upward parallel to each other, forming the heating-chamber K.

The end walls, C, of the box extend but a short distance above the throat J, where they terminate, their upper ends forming rests L to support the tire during operation.

The lamps or heating-boxes may be provided with suitable feet or supports, M.

N is a ring or disk, made of any suitable material, which serves to support the heaters during operation. Said ring or disk should be of sufficient size to accommodate the number of heaters required for a large tire, and it is provided with annular grooves O to receive any overflowing oil, which might otherwise be a source of danger to the work-shop where the device is used.

The operation of our invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed.

A suitable number of the lamps or heaters to accommodate a tire of the desired size are grouped together upon the ring or disk N, as closely together as possible. Oil is poured into the receptacles and ignited, and the tire is then placed in position, resting upon the supports L, formed by the upper edges of the walls C. The tire may thus be rapidly, evenly, and conveniently heated.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

1. The herein-described segmental box A, having its bottom D provided with an opening, E, surrounded by a flange, F, as set forth.

2. The segmental box A, having its bottom D provided with slot E, surrounded by a flange, F, and the ridges G, as set forth.

3. The segmental box A, having oil-receptacle I, draft-openings E H, sides B, contracted so as to form a throat, J, above which they are expanded to form a heating-chamber, K, and ends C, terminating a short distance above throat J, so as to form rests or supports L, as set forth.

4. The combination, with the herein-described segmental tire-heaters, of the ring or disk N, having annular grooves O, as and for the purpose set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

WM. H. FREY.
JAMES H. FREY.

Witnesses:
C. SWALLEY,
J. R. LITTELL.